IN THE CLAIMS

The listing of the claims which follows replaces any and all prior versions and/or listings of the claims in the application.

1. (currently amended) A compound of Formula I, or an individual enantiomer or diastereomer thereof, or a pharmaceutically acceptable salt thereof:

wherein:

 $Z \text{ is } \frac{O \text{ or } N-R^9}{}$;

R¹ is -CH₂-R^J, and R^J is phenyl which is optionally substituted with from 1 to 4 substituents each of which is independently:

- (1) -C₁-4 alkyl,
- (2) -O-C₁₋₄ alkyl,
- (3) -C₁₋₄ haloalkyl,
- (4) -O-C₁-4 haloalkyl,
- (5) halo,
- (6) -CN,
- (7) -N(RA)RB,
- (8) -C(=O)N(RA)RB,
- (9) -S(=O)RA,
- (10) -SO₂RA,
- (11) $-N(RA)SO_2RB$,
- (12) -N(RA)SO₂N(RA)RB,
- (13) -N(RA)C(=O)RB, or
- (14) -N(RA)C(=O)-C(=O)N(RA)RB;

R¹-is-C₁₋₆-alkyl substituted with R^J, wherein R^J is:

- (A) aryl or aryl fused to a 5- or 6-membered heteroaromatic ring containing from 1 to 4-heteroatoms independently selected from N, O and S, wherein the aryl or fused aryl is
 - (i) optionally substituted with from 1 to 5 substituents each of which is independently:
 - (1) $-C_1$ 6 alkyl, which is optionally substituted with OH, O-C₁ 6 alkyl, O-C₁ 6 haloalkyl, CN, NO₂, N(RA)RB, -C(=O)N(RA)RB, -C(=O)RA, $-CO_2RA$, $-S(O)_nRA$, $-SO_2N(RA)RB$, -N(RA)C(=O)RB, $-N(RA)CO_2RB$, $-N(RA)SO_2RB$, $-N(RA)SO_2N(RA)RB$, -OC(=O)N(RA)RB, or -N(RA)C(=O)N(RA)RB,
 - (2) O-C₁₋₆ alkyl,
 - (3) -C₁₋₆ haloalkyl,
 - (4) O-C₁₋₆ haloalkyl,
 - (5) OH,
 - (6) halo,
 - (7) -CN,
 - (8) NO2.
 - (9) N(RA)RB
 - (10) -C(=O)N(RA)RB,
 - (11) $-C(=O)RA_{7}$
 - (12) -CO₂RA,
 - $\frac{(13)}{SRA}$
 - (14) $-S(=0)RA_{-}$
 - (15) SO_2RA
 - (16) $SO_2N(RA)RB$,
 - $\frac{(17)}{N(RA)SO_2RB_7}$
 - (18) $N(R^A)SO_2N(R^A)R^B$,
 - (19) N(RA)C(=O)RB
 - (20) $N(R^A)C(=0)$ $C(=0)N(R^A)R^B$, or
 - (21) N(RA)CO2RB, and
 - (ii) optionally substituted with 1 or 2 substituents each of which is independently:
 - (1) aryl,
 - (2) -C₁₋₆ alkyl substituted with aryl,
 - (3) HetA.

- (4) -C(=O)-HetA; or
- (5) HetB;

wherein each HetA is independently a C4_7 azacycloalkyl or a C3_6 diazacycloalkyl, either of which is optionally substituted with from 1 to 3 substituents each of which is independently oxo or C1_6 alkyl; and

wherein each HetB is a 5- or 6-membered heteroaromatic ring containing from 1 to 4 heteroatoms independently selected from N, O and S, wherein the heteroaromatic ring is optionally substituted with from 1 to 4 substituents each of which is independently halo, -C₁₋₆-alkyl, -C₁₋₆-haloalkyl, O-C₁₋₆-alkyl, -O-C₁₋₆-haloalkyl, or hydroxy; or

- (B) a 5- or 6-membered heteroaromatic ring containing from 1 to 4 heteroatoms independently selected from N, O and S; wherein the heteroaromatic ring is:
 - (i) optionally substituted with from 1 to 4 substituents each of which is independently halogen, -C₁₋₆-alkyl, -C₁₋₆-haloalkyl, -O-C₁₋₆-alkyl, -O-C₁₋₆-haloalkyl, or hydroxy, and
 - (ii) optionally substituted with 1 or 2 substituents each of which is independently aryl or -C₁₋₆ alkyl substituted with aryl;

R², R³, R⁴ and R⁵ are defined as follows:

(A) R², R³, R⁴ and R⁵ are each independently: R² and R⁴ are each independently:

- (1) -H,
- -C1-6 alkyl, which is optionally substituted with -OH, -O-C1-6 alkyl, -O-C1-6 haloalkyl, -CN, -N(RA)RB, -C(=O)N(RA)RB, -C(=O)RA, -CO2RA, -S(O)nRA, -SO2N(RA)RB, -N(RA)C(=O)RB, -N(RA)CO2RB, -N(RA)SO2RB, -N(RA)SO2N(RA)RB, -N(RA)C(=O)N(RA)RB, or -OC(=O)N(RA)RB,
- (3) -C₁₋₆ haloalkyl,
- (4) CycA,
- (5) AryA,
- (6) HetC, or
- (7) -C₁₋₆ alkyl substituted with CycA, AryA, or HetC;

- (B) R² and R⁴ together with the carbon atoms to which each is attached form a carbon-carbon double bond; and R³ and R⁵ are each independently as defined in part A above;
- (C) R² and R³ together with the carbon atom to which they are both attached form a 3- to 8-membered saturated carbocyclic ring which is optionally substituted with from 1 to 4 substituents each of which is independently OH, C₁₋₆ alkyl, C₁₋₆ haloalkyl, O-C₁₋₆ alkyl, or O-C₁₋₆ haloalkyl; and R⁴ and R⁵ are each independently as defined in part A above; or
- (D) R⁴ and R⁵ together with the carbon atom to which they are both attached form a 3- to 8-membered saturated carbocyclic ring which is optionally substituted with from 1 to 4 substituents each of which is independently OH, C₁₋₆ alkyl, C₁₋₆ haloalkyl, O-C₁₋₆ alkyl, or O-C₁₋₆ haloalkyl; and R² and R³ are each independently as defined in part A above;

R³ and R⁵ are both H;

R6 is:

- (1) -H,
- -C1-6 alkyl, which is optionally substituted with OH, O-C1-6 alkyl, O-C1-6 haloalkyl, CN, N(RA)RB, C(=O)N(RA)RB, C(=O)RA, CO2RA, S(O)nRA, SO2N(RA)RB, N(RA)C(=O)RB, N(RA)CO2RB, N(RA)SO2RB, N(RA)RB, N(RA)C(=O)N(RA)RB, or OC(=O)N(RA)RB,
- (3) -C₁₋₆ fluoroalkyl, haloalkyl,
- (4) CycA,
- (5) AryA, or
- (6) HetC. or
- (6) (7) -C₁-6 alkyl substituted with AryA; CycA, AryA, or HetC;

R7 is H or -C1-6 alkyl;

R8 is R7 and R8 are each independently:

- (1) -H,
- -C1-6 alkyl, which is optionally substituted with OH, O-C1-6 alkyl, O-C1-6 haloalkyl, CN, N(RA)RB, C(=O)N(RA)RB, C(=O)RA, CO2RA, S(O)nRA, SO2N(RA)RB, N(RA)C(=O)RB, N(RA)CO2RB, N(RA)SO2RB, N(RA)RB, N(RA)C(=O)N(RA)RB, or OC(=O)N(RA)RB,

- (3) -CO₂RA,
- $(4) \quad -C(=O)N(RA)RB,$
- (5) -RK,
- $(6) \quad -C(=O)-RK,$
- (7) -C(=O)N(RA)-RK, or
- $(8) \quad -C(=O)N(RA)-C_{1-6} \text{ alkylene-RK};$
- (3) -C₁₋₆ haloalkyl,
- (4) -C(-O)RA
- (5) $-CO_2RA_7$
- (6) -C(-O)N(RA)RB,
- (7) $N(RA)SO_2N(RA)RB$,
- (8) -RK,
- (9) -C(=0)-RK.
- (10) -C(=0)N(RA)-RK,
- (11) -C(=O)N(RA)-C₁₋₆ alkylene-RK, or
- (12) C₁₋₆ alkyl substituted with R^K, C(=O) R^K, C(=O)N(R^A) R^K, or C(=O)N(R^A) C₁₋₆ alkylene R^K;

or alternatively R⁷ and R⁸ together with the carbon atom to which they are both attached form a 3- to 7-membered 3- to 8-membered saturated carbocyclic <u>ring</u>; ring which is optionally substituted with from 1 to 4 substituents each of which is independently halogen, OH, C₁₋₆ alkyl, O-C₁₋₆ alkyl, or O-C₁₋₆ haloalkyl;

R⁹ is:

- (1) -H,
- -C1-6 alkyl, which is optionally substituted with OH, O-C1-6 alkyl, O-C1-6 haloalkyl, CN, N(RA)RB, C(=O)N(RA)RB, C(=O)RA, CO2RA, S(O)nRA, SO2N(RA)RB, N(RA)C(=O)RB, N(RA)CO2RB, N(RA)SO2RB, N(RA)RB, N(RA)C(=O)N(RA)RB, or OC(=O)N(RA)RB,
- (3) -C₁₋₆ fluoroalkyl, haloalkyl,
- (4) CycA, or
- (5) AryA,
- (6) HetC, or
- (5) (7) -C₁₋₆ alkyl substituted with CycA, AryA, or HetC;

each n is independently an integer equal to zero, 1, or 2;

each RA is independently H or C₁₋₆ alkyl;

each RB is independently H or C₁₋₆ alkyl;

each RK is independently CycA, AryA, or HetC;

each CycA is independently a C₃₋₈ cycloalkyl, which is optionally substituted with from 1 to 4 substituents each of which is halogen, -OH, -C₁₋₆ alkyl, -C₁₋₆ haloalkyl, -O-C₁₋₆ alkyl, or -O-C₁₋₆ haloalkyl;

each AryA is independently phenyl, an aryl, which is

- optionally substituted with from 1 to 5 substituents each of which is independently -C1-6 alkyl, -C1-6 alkylene-OH, -C1-6 alkylene-O-C1-6 alkyl, -C1-6 alkylene-O-C1-6 alkylene-O-C1-6 alkylene-O-C1-6 alkylene-C(=O)RA, -C1-6 alkylene-C(=O)RA, -C1-6 alkylene-C02RA, -C1-6 alkylene-S(O)nRA, -O-C1-6 alkyl, -C1-6 haloalkyl, -O-C1-6 haloalkyl, -OH, halo, -N(RA)RB, -C(=O)N(RA)RB, -C(=O)RA, -C02RA, -S(O)nRA, or -SO2N(RA)RB, and ; and
- (b) optionally substituted with C₃₋₈ cycloalkyl, aryl, HetD, or -C₁₋₆ alkyl substituted with C₃₋₈ cycloalkyl, aryl, or HetD;

each HetC is independently a 4- to 7-membered saturated or unsaturated heterocyclic ring containing at least one carbon atom and from 1 to 4 heteroatoms independently selected from N, O and S, wherein the heterocyclic ring is

- (a) optionally substituted with from 1 to 4 substituents each of which is halogen, -C₁-6 alkyl, -C₁-6 haloalkyl, -O-C₁-6 alkyl, -O-C₁-6 haloalkyl, OH, or oxo, and.
- (b) optionally substituted with C₃ 8 cycloalkyl, aryl, HetD, or -C₁ 6 alkyl substituted with C₃ 8 cycloalkyl, aryl, or HetD;

each HetD is independently a 4- to 7-membered saturated or unsaturated heterocyclic ring containing at least one carbon atom and from 1 to 4 heteroatoms independently selected from N, O and S; and

each aryl is independently (i) phenyl or (ii) a 9- or 10-membered bicyclic, fused carbocylic ring system in which at least one ring is aromatic.

- 2. (canceled)
- 3. (canceled)
- 4. (canceled)
- 5. (canceled)
- 6. (currently amended) The compound according to claim $\underline{1}$, $\underline{5}$, or an individual enantiomer or diastereomer thereof, or a pharmaceutically acceptable salt thereof, wherein R^6 is H.
 - 7. (canceled)
 - 8. (canceled)
- 9. (currently amended) A compound according to claim 1, which is a compound of Formula IIa II, or an individual enantiomer or diastereomer thereof, or a pharmaceutically acceptable salt thereof:

wherein:

 X^1 and X^2 are each independently -H, -C₁₋₄ alkyl, -O-C₁₋₄ alkyl, -C₁₋₄ haloalkyl, -O-C₁₋₄ haloalkyl, halo, -CN, -N(RA)RB, -C(=O)N(RA)RB, or -S(O)_nRA, wherein n is an integer equal to zero, 1, or 2;

R² and R⁴ are each independently -H, -C₁₋₄ alkyl, -C₁₋₄ fluoroalkyl, C₃₋₆ cycloalkyl, phenyl, or benzyl;

R², R³, R⁴ and R⁵ are defined as follows:

- (A) R² and R⁴ are each independently -H, -C₁_4 alkyl, -C₁_4 fluoroalkyl, C₃_6 eyeloalkyl, phenyl, or benzyl; and R⁴ and R⁵ are both H;
- (B) R² and R⁴ together with the carbon atoms to which each is attached form a carbon carbon double bond; and R³ and R⁵ are both H;
- (C) R² and R³ together with the carbon atom to which they are both attached form eyelopropyl; and R⁴ and R⁵ are both H; or
- (D) R⁴ and R⁵ together with the carbon atom to which they are both attached form eyelopropyl; and R² and R³ are both H;

R⁶ is H, -C₁-4 alkyl, CF₃, cyclopropyl, phenyl or benzyl;

R⁷ is H or -C₁-4 alkyl;

 R^8 is -H, -C1-4 alkyl, -CO2-C1-4 alkyl, -C(=O)NH(C1-4 alkyl), -C(=O)N(C1-4 alkyl)2, C3-6 cycloalkyl, HetF, -C(=O)-HetE, or -C(=O)N(R^A)-(CH2)1-2-HetF; wherein

HetE is a 4- to 7-membered saturated heterocyclic ring containing at least one carbon atom and from 1 to 4 heteroatoms selected from 1 to 4 N atoms, zero or 1 oxygen atom, and zero or 1 sulfur atom, wherein the saturated heterocyclic is optionally substituted with from 1 to 3 substituents each of which is independently oxo or C₁₋₄ alkyl; and with the proviso that the saturated heterocyclic is attached to the -C(=O)- via a ring N atom; and

HetF is a 5- or 6-membered heteroaromatic ring containing from 1 to 4 heteroatoms independently selected from N, O and S, wherein the heteroaromatic ring is optionally substituted with 1 or 2 substituents each of which is independently a C₁₋₄ alkyl;

or alternatively R⁷ and R⁸ together with the carbon atom to which they are both attached form a 3- to 6-membered saturated carbocyclic ring;

R⁹ is -H, -C₁₋₄ alkyl, -CH₂CF₃, -C₃₋₆ cycloalkyl, -CH₂-C₃₋₆ cycloalkyl, or -CH₂-phenyl;

each RA is independently H or C1-4 alkyl; and

each RB is independently H or C₁₋₄ alkyl.

10. (currently amended) A compound according to claim 9, or an individual enantiomer or diastereomer thereof, or a pharmaceutically acceptable salt thereof, wherein:

 X^1 and X^2 are each independently H, fluoro, chloro, methyl, trifluoromethyl, methoxy, CN, -SO₂CH₃, -C(=O)NH(CH₃), or -C(=O)N(CH₃)₂;

R² and R⁴ are both H;

R², R³, R⁴ and R⁵ are all H;

R6 is H, methyl, cyclopropyl, or phenyl;

R⁷ is H or methyl;

R⁸ is -H, -C₁-4 alkyl, -C₀-C₁-4 alkyl, -C(=O)NH(C₁-4 alkyl), -C(=O)N(C₁-4 alkyl)₂, C₃-6 cycloalkyl, HetF, -C(=O)-HetE, or -C(=O)N(RA)-(CH₂)₁-2-HetF; wherein

HetE is selected from the group consisting of:

HetF is selected from the group consisting of pyrrolyl, imidazolyl, triazolyl, tetrazolyl, oxazolyl, isooxazolyl, pyridyl, pyrimidinyl, and pyrazinyl;

or alternatively R⁷ and R⁸ together with the carbon atom to which they are both attached form cyclopropyl, cyclobutyl, cyclopentyl, or cyclohexyl; and

- R⁹ is H, methyl, ethyl, n-propyl, isopropyl, -CH₂CF₃, cyclopropyl, or -CH₂-cyclopropyl.
- 11. (currently amended) A compound <u>according to claim 1</u>, or a pharmaceutically acceptable salt thereof, selected from the group consisting of:
- 2-(4-fluorobenzyl)-8-hydroxy-6-methyl-2,3,4,4a,5,6-hexahydro-2,6-naphthyridine-1,7-dione;
- 2-(4-fluorobenzyl)-8-hydroxy-5,5,6-trimethyl-2,3,4,4a,5,6-hexahydro-2,6-naphthyridine-1,7-dione;
- (+)-2-(4-fluorobenzyl)-8-hydroxy-5,5,6-trimethyl-2,3,4,4a,5,6-hexahydro-2,6-naphthyridine-1,7-dione;
- (-)-2-(4-fluorobenzyl)-8-hydroxy-5,5,6-trimethyl-2,3,4,4a,5,6-hexahydro-2,6-naphthyridine-1,7-dione;
- 2-(4-fluorobenzyl)-8-hydroxy-6-methyl-4a-phenyl-2,3,4,4a,5,6-hexahydro-2,6-naphthyridine-1,7-dione;
- (+)-2-(4-fluorobenzyl)-8-hydroxy-6-methyl-4a-phenyl-2,3,4,4a,5,6-hexahydro-2,6-naphthyridine-1,7-dione;
- (-)-2-(4-fluorobenzyl)-8-hydroxy-6-methyl-4a-phenyl-2,3,4,4a,5,6-hexahydro-2,6-naphthyridine-1,7-dione;
- 5-(tert-butyloxycarbonyl)-2-(4-fluorobenzyl)-8-hydroxy-6-methyl-2,3,4,4a,5,6-hexahydro-2,6-naphthyridine-1,7-dione, and diastereomers and enantiomers thereof;
- 5-ethyl-2-(4-fluorobenzyl)-8-hydroxy-6-methyl-2,3,4,4a,5,6-hexahydro-2,6-naphthyridine-1,7-dione, and diastereomers and enantiomers thereof;
- 6-(cyclopropylmethyl)-2-(4-fluorobenzyl)-8-hydroxy-5,5-dimethyl-2,3,4,4a,5,6-hexahydro-2,6-naphthyridine-1,7-dione;
- 5-(dimethylaminocarbonyl)-2-(4-fluorobenzyl)-8-hydroxy-6-methyl-2,3,4,4a,5,6-hexahydro-2,6-naphthyridine-1,7-dione, and diastereomers and enantiomers thereof
- 2-(3-chloro-4-fluorobenzyl)-8-hydroxy-5,5,6-trimethy-2,3,4,4a,5,6-hexahydro-2,6-naphthyridine-1,7-dione;
- (+)-2-(3-chloro-4-fluorobenzyl)-8-hydroxy-5,5,6-trimethy-2,3,4,4a,5,6-hexahydro-2,6-naphthyridine-1,7-dione;

- (-)-2-(3-chloro-4-fluorobenzyl)-8-hydroxy-5,5,6-trimethy-2,3,4,4a,5,6-hexahydro-2,6-naphthyridine-1,7-dione;
- 6'-(4-fluorobenzyl)-4'-hydroxy-2'-methyl-6',7',8',8a'-tetrahydro-2' *H*-spiro[cyclopentane-1,1'-[2,6]naphthyridine]-3',5'-dione;
- (+)-6'-(4-fluorobenzyl)-4'-hydroxy-2'-methyl-6',7',8',8a'-tetrahydro-2' *H*-spiro[cyclopentane-1,1'-[2,6]naphthyridine]-3',5'-dione;
- (-)-6'-(4-fluorobenzyl)-4'-hydroxy-2'-methyl-6',7',8',8a'-tetrahydro-2' *H*-spiro[cyclopentane-1,1'-[2,6]naphthyridine]-3',5'-dione;
- 2-(3,4-difluorobenzyl)-8-hydroxy-5,5,6-trimethy-2,3,4,4a,5,6-hexahydro-2,6-naphthyridine-1,7-dione;
- 6'-(4-fluorobenzyl)-4'-hydroxy-2'-methyl-6',7',8',8a'-tetrahydro-2' *H*-spiro[cyclobutane-1,1'-[2,6]naphthyridine]-3',5'-dione;
- 5-[(2-methylpropyl)aminocarbonyl]-2-(4-fluorobenzyl)-8-hydroxy-6-methyl-2,3,4,4a,5,6-hexahydro-2,6-naphthyridine-1,7-dione, and diastereomers and enantiomers thereof;
- 5-(tert-butylaminocarbonyl)-2-(4-fluorobenzyl)-8-hydroxy-6-methyl-2,3,4,4a,5,6-hexahydro-2,6-naphthyridine-1,7-dione, and diastereomers and enantiomers thereof;
- 5-[(2-pyridylmethyl)aminocarbonyl]-2-(4-fluorobenzyl)-8-hydroxy-6-methyl-2,3,4,4a,5,6-hexahydro-2,6-naphthyridine-1,7-dione, and diastereomers and enantiomers thereof
- 5-(pyrimidin-2-yl)-2-(4-fluorobenzyl)-8-hydroxy-6-methyl-2,3,4,4a,5,6-hexahydro-2,6-naphthyridine-1,7-dione, and diastereomers and enantiomers thereof;
- 2-(3-chloro-4-fluorobenzyl)-8-hydroxy-6-cyclopropyl-2,3,4,4a,5,6-hexahydro-2,6-naphthyridine-1,7-dione;
- (+)-2-(3-chloro-4-fluorobenzyl)-8-hydroxy-6-cyclopropyl-2,3,4,4a,5,6-hexahydro-2,6-naphthyridine-1,7-dione; and
- (-)-2-(3-chloro-4-fluorobenzyl)-8-hydroxy-6-cyclopropyl-2,3,4,4a,5,6-hexahydro-2,6-naphthyridine-1,7-dione.
- 12. (previously presented) A pharmaceutical composition comprising an effective amount of a compound according to claim 1, or an individual enantiomer or diastereomer thereof, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

- 13. (canceled)
- 14. (withdrawn) A method for preventing or treating infection by HIV or for preventing, treating or delaying the onset of AIDS in a subject in need thereof which comprises administering to the subject an effective amount of the compound according to claim 1, or an individual enantiomer or diastereomer thereof, or a pharmaceutically acceptable salt thereof.
 - 15. (canceled)
 - 16. (canceled)
 - 17. (canceled)
 - 18. (canceled)
- 19. (currently amended) A pharmaceutical combination which is (i) a compound according to claim 1, or an individual enantiomer or diastereomer thereof, or a pharmaceutically acceptable salt thereof, and (ii) an HIV infection/AIDS antiviral agent selected from the group consisting of HIV protease inhibitors, non-nucleoside HIV reverse transcriptase inhibitors and nucleoside HIV reverse transcriptase inhibitors; wherein the compound of (i) or its pharmaceutically acceptable salt and the HIV infection/AIDS antiviral agent of (ii) are each employed in an amount that renders the combination effective for inhibiting HIV integrase, for preventing or treating infection by HIV, or for preventing, treating or delaying the onset of AIDS.